INDIAN NOTES

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MUSEUM OF THE AMERICAN INDIAN

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CARVED WOODEN DANCE MASK

Fashioned from driftwood *circa* 1900, this is an example of a variety of designs to be found in Eskimo art; these are usually burned following their use in ceremonial dances. It is one of the 500 specimens which will be seen in our new traveling exhibition, *Indian Arts of the Americas*, announced in this issue.

Kuskwogmiut Eskimo
Mumtrelek, Alaska

1/6818
4½ x 8½ inches

IN THIS ISSUE

Kathy Berkman, Editor

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HANDEDNESS IN PREHISTORY:
A Study of Tools from Ancient Chile

by Anna C. Roosevelt
Curatorial Assistant

Left: wooden spade with skin-wrapped handle, right-handed wear on the blade (11/1644), Chiu Chiu, Chile; *right*: large wooden ladle with right-handed wear on bowl (11/1645), Chiu Chiu, Chile.

Photographs by Anna C. Roosevelt

Humans show highly developed bilateral assymetry in the use of their hands for skilled actions. If data on hand dominance could be derived from wear patterns on archaeological tools, then this information could be used to test a genetic model for the inheritance of handedness. In addition, if the distribution of hand dominance in an ancient population can be determined from wear patterns present on tools used by that population, then the distributional pattern can be compared to the pattern predicted by the model.

The model chosen for the test was formulated by Marion Annett and it explains the occurrence of handedness in terms of the classic Mendelian principle of inheritance:

> Handedness is determined by two alleles, D which manifests right handedness, and R which manifests left handedness. D is usually dominant and R usually recessive, but there is partial penetrance of R in heterozygotes (Annett 1964:59).

According to this monofactorial genetic model, an individual heterozygous for the trait of handedness could be right handed, ambidextrous, or left handed, while the homozygous individual should use his dominant hand consistently. Because of the postulated partial penetrance of the recessive allele, careful testing was expected to reveal its presence in heterozygotes.

The archaeological tools brought to bear on the model were wooden spoons and wooden and bone spatulas from Late Ceramic Stage (A.D. 1000-1500) sites of the Lasana Complex in the Upper Rio Loa region of North Chile in the collections of the Museum of the American Indian and American Museum of Natural History. (Nuñez Atencio 1969:207-215).

One of the many problems inherent in a study of handedness derived from wear on tools is that there are very few functional types of tools whose wear patterns can be read as either right or left handed. To be suitable for such a study a tool must have distal and proximal ends which are differentiated from each other as well as a distinct upper and lower surface. In other words, one end of the tool must have been habitually held in the hand, and the difference between that end and the working end must be discernible to the investigator. In addition, the tool must have been used with one surface up or facing the user, and the upper and lower surfaces of the tool must be recognizable. In order for wear to occur, the material of the implement must either be soft enough to be abraded by the material against which it was used or hard enough to pick up particles of that material. The lifetime of the tool must have been short, its function simply utilitarian, and its ownership personal, not communal; otherwise the wear patterns present on the tool cannot be claimed to have been produced by a single individual.

The spoons and spoon-like implements from North Chile meet most of the above requirements. Spoons as a functional type are virtually useless for stirring, ladling, or eating when held by the bowl, turned upside down, or turned away from the user. The Chilean samples are made of wood or bone, and were probably used either to prepare and eat food in coarse ceramic containers or were used to mix grainy pigment or snuff on wooden tablets. Of the Chilean spoon-like utensils, the wooden spoons showed the clearest wear patterns, but the bone spatulas, although they showed less obvious wear, were also able to be included in the sample. The

bone spatulas, often decorated, may have been kept more carefully than the plain utilitarian wooden spoons and may therefore have been more likely to have been used by successive owners.

Left: wooden spoon with right-handed wear on bowl (9/6690), Cave, Chiu Chiu, Chile; *right:* wooden spoon with right-handed wear on bowl (9/6691), Cave, Chiu Chiu, Chile.

Left: wooden spoon with right-handed wear on bowl (11/1646), Chiu Chiu, Chile; *middle:* wooden spoon with right-handed wear on bowl (9/6688), Cave, Chiu Chiu, Chile; *right:* wooden spoon with right-handed wear on bowl (15/9980), Lasana, Chile.

In order to use wear patterns on tools to reconstruct the distribution of handedness in a given population, the function of the tool must be correctly identified by experimentation with tools of similar shape. The func-

tions of the spoons: stirring, scooping and eating, were tested with an experiment. Modern wooden cooking spoons of similar form and size were used to stir and ladle out food in a coarse unglazed pottery vessel. The spoon used for scooping developed a localized patch of wear on the underside of the bowl of the spoon slightly to the right of the distal tip of the bowl (the right hand was used in each case). The spoon used for stirring developed a broader band of abrasion that also extended further to the right of the underside of the spoon bowl at its distal end. These patterns of wear were identical in shape and placement to the wear patterns present on the archaeological tools. And it was concluded that the function had been correctly inferred.

Left: bone spatula with right-handed wear on blade (9/2691), Cave, Chiu Chiu, Chile; *right:* wooden spatula with right-handed wear on bowl (15/9981), Lasana, Chile.

The spatulate bone and wood implements have been associated by several archaeologists with the wooden rectangular palettes that abound in Late Ceramic Stage sites in North Chile. They may have been used to mix ground vegetable material for snuff or to dip out small amounts of the powdered pigment that is found in small leather covered wooden boxes that occur in graves of the Loa region. The spatulas, which are either miniature long-handled spoons, or small, flat-bowled shovel-shaped implements, showed wear in the form of a flat abraded area on the end of the flat bowl, as if they had been used on a flat surface. It was not possible to obtain any comparable sort of tool with which to experiment against different kind of surfaces, so the spatulas' function and the import of their wear patterns remain somewhat obscure. The fact remains, however, that the flat spatula-like tools were worn at their distal ends through contact with some surface and that the wear took three forms when read from the back of the implement: right, left, and indeterminate.

Related to the problem of determining the function of the archaeological tools is the question of the universality of human motor habits in the use of certain functional types of tools of wide distribution in time and space. The most efficient method of using spoons for stirring or ladling, or spatulas for stirring or lifting material from a container is to hold the tool so that the concave part of the bowl is facing up or toward the user and so that the handle is at an angle. If the ancient users of the tools held them absolutely vertically or with the bowl turned down and away, then it would be impossible to tell from a given tool's wear patterns which hand was commonly used to manipulate it. It is, however, demonstrable that such tools' efficiency is best expressed by what is today the standard way of holding them, and, in addition, the ancient wear patterns are sufficiently similar to wear produced in the course of standard use to indicate similar motor habits. Accordingly, the wear on the ancient Chilean tools will be interpreted here with the assumption that such motor habits were universal.

Redware ceramic bowl with two lugs, decorated on the interior surface with faint designs in black (9/2652), Cave, Chiu Chiu, Chile; wooden spoon with right-handed wear on bowl (9/6688), Cave, Chiu Chiu, Chile.

The population that was reconstructed in regard to the distribution of handedness lived in the Upper Loa River valley sometime between 400 and 1535 AD. These people are generally called the Atacameño after the Atacama desert through which the Loa flows. The few controlled stratigraphic excavations that have been made in the area indicate that Atacameño subsistence activities included intensive agriculture with slope terracing and canal irrigation, large-scale llama and alpaca herding, and small-scale hunting (Pollard 1970:304). Although maize was by far the most important food plant, beans, quinoa, chili peppers, and gourds were also cultivated. The material remains associated with the Atacameño include plain or simply decorated ceramics, basketry, warp-faced woolen textiles, skin bags, pyro-engraved gourds, wooden boxes with leather covers, bone snuffing tubes and spatulas, rectangular wooden tablets, wooden bows and arrows, wooden harness toggles, and wooden spoons (Pollard 1970:285; Montell 1926; Latcham 1938:7-11).

Communications seem to have been active and sustained in this region during the late part of the Ceramic stage. Artifacts from different sites in the area are indistinguishable stylistically from each other. Within the economic system a series of dependent relationships seem to have operated through the distribution of goods. It appears that certain towns specialized in the production of commodities not made elsewhere in the region. Edward Lanning (n.d. 1972) has suggested on the basis of analysis of clays

Left: wooden spoon with right-handed wear on bowl (9/6690), Cave, Chiu Chiu, Chile; *right:* wooden spoon with right-handed wear on the bowl (9/6691), Cave, Chiu Chiu, Chile.

used to manufacture pottery that the inhabitants of the village of Chiu Chiu were manufacturing and distributing pottery vessels to other villages. This sort of exchange was probably accompanied by inter-village marriages and reciprocal obligations. It looks, therefore, that one is justified in considering the population of the Upper Rio Loa as a breeding population.

Left: wooden spatula with left-handed wear on blade (9/2689), Cave, Chiu Chiu, Chile; *right:* wooden spatula with right-handed wear on blade (9/6692), Cave, Chiu Chiu, Chile.

Basket with black geometric decoration (9/2668), Cave, Chiu Chiu, Chile; gourd with pyro-engraved geometric decoration (9/2653), Cave, Chiu Chiu, Chile; wooden container with skin cap (4/995), Calama, Chile; small blackware jar with pierced vertical lugs (18/224), Caldera, Chile; wooden plate (9/2679), Cave, Chiu Chiu, Chile; redware jar with vertical strap handle (9/2652), San Jose de Piquehuen, Aconcagua Province, Chile.

The body of material culture to which the tools under study belong reposes in museums and private collections in Europe, South America, and the United States. Most of the artifacts were excavated by local grave-robbers and sold to collectors, who in turn gave them to museums. So little stratigraphic work has been done at Atacameño village sites that this material is difficult to place precisely in time. On the basis of site survey and selective excavation, Gordon Pollard has divided the Loa region Ceramic Stage into three complexes. The Atacameño material could be placed anywhere within the long time span of the last complex, the Lasana complex. Stylistic changes over time are difficult to find, and it may be that artifacts made during the earlier part of this period do not differ significantly from those made shortly before the conquest.

The chronological spread of this assemblage of artifacts can be narrowed by Pollard's dating of the more substantial occupations of the sites where the collections were excavated to *ca.* A.D. 1300-1535. The large size of museum collections of Atacameño material would indicate that most of it must date to the period of maximum population. This is very thin evidence indeed, but it allows one to say that the distinctive assemblage of artifacts of Upper Rio Loa provinces probably date to the fourteenth, fifteenth, and sixteenth centuries.

In order to establish whether a common household article like a cooking spoon would have been owned and used in common or by one individual, it is necessary to know something of social organization and the composition of residence units. Only if spoons and spatulas were personal property could they be used to infer the handedness of their owners.

According to Pollard, the high development of irrigation agriculture and herding achieved by the Rio Loa population during Lasana Complex times allowed the population to grow to the point where social organization of the rank level became the best way to integrate the activities that made up the economic system and organize intra-village social relationships (Pollard 1970:324).

Pollard's evidence of rank social organization consists of the fact that pre-Inca Lasana Complex villages are invariably non-nucleated, agglutinated villages. He feels that the small degree of contrast between houses and between graves and their furnishings is well within the range of status differences expectable for a society in which people were differentiated from each other only by sex, age, and rank (Pollard 1970:321-2).

In a rank society, where slaves or people who serve or cook for a living do not exist, presumably the elder women of each household do the cooking. The ethnographic literature does not provide data on household composition or division of labor, but measurements of house sizes which have been published suggest that nuclear families were the rule. Latcham reports that houses at Chiu Chiu, one of the main village sites of the Lasana Complex, were on the average six by four meters. Ryden put the upper figure for house size at Lasana at about eight meters square (Ryden 1944:25). This range of house size seems far too small to have contained a group larger than a nuclear family.

If, as Pollard suggests, ranking was the principle which integrated each Lasana Complex community; if, as the archaeological evidence seems to indicate, the residence unit was the nuclear family, and if, according to the aboriginal Andean pattern, the adult woman of a family prepared and served meals, then the wear patterns present on the cooking spoons should refer to the handedness of women. The possibility that the older children of the family helped in such household tasks cannot be eliminated without more detailed ethnographic accounts of the present Rio Loa rural population.

As for the bone and wood spatulas that constitute part of the sample considered here, very little can be said about the likelihood of their having belonged to a single individual. Their ceremonial connotation might be taken to mean that they would have been owned and used by one person,

but their inferred ceremonial nature might also mean that they were carefully saved and passed on from one generation to another.

The archaeological evidence, then, does not make possible the conclusion that the wear patterns on the Chilean tools was the result of use by one individual. The difficulty of establishing a one tool: one person equivalence suggests that the handedness of the tools accurately represents the handedness of the people who used them.

Large wooden llama bell (11/1674), Chiu Chiu, Chile; small wooden llama bell (11/1673), Chiu Chiu, Chile; wooden toggle with woolen cord attached (9/2695), Cave, Chiu Chiu, Chile; wooden toggle with skin strap attached (9/2680), Cave, Chiu Chiu, Chile; stone blade hafted to stick with skin strap (4/946), Chiu Chiu, Chile; wooden clod breaker (17/7946), Chiu Chiu, Chile.

The Chilean tools were examined both by eye and with low power magnification. Wear showed up on the wooden tools as an area of lighter more porous surface. The bone tools exhibited a band of scratches. In most cases the surface abrasion was accompanied by a substantial wearing away of the rim of the spoon bowl or working end of the spatula blade. Handedness was read from the back of the bowl or blade as follows: when

the patch of wear occurred farther to the right of the distal portion of the bowl or blade, the tool was clasified right, when the wear extended equally on either side, the tool was classified indeterminate, and when the wear extended farther to the left, the tool was classified left. (Tools showing no wear were eliminated from the sample.)

Out of a sample of seventy-six tools from the collections of the American Museum of Natural History and the Museum of the American Indian, forty-eight were worn on the right, twenty-six were indeterminate, and four were worn on the left. Levene's formula was used to calculate expected numbers and the Chi Square test determined the statistical significance of the difference between the expected and observed numbers: (Let g_1 be the factor for right, and g_2 be that for left.)

48 right
26 indeterminate
4 left

$g_1 = 2(48) + 26 = 122.00$

$g_2 = 2(4) + 26 = 34.00$

$$\text{N. right expected} = \frac{122(122-1)}{2(156-1)} = 47.62$$

$$\text{N. indet. expected} = \frac{122 \times 34}{156-1} = 26.76$$

$$\text{N. left expected} = \frac{34(34-1)}{2(156-1)} = 3.62$$

Chi Square = .06439 (1 degree of freedom)

The difference between the observed and expected numbers was statistically insignificant. Thus the proportions of handedness in tools closely approached the percentages of the different varieties of hand dominance that were found by Annett in her samples of humans. These results support the initial assumption, that each spoon belonged to and was used by a single individual.

The study of handedness in ancient populations can shed light on biological processes, such as inheritance. Given optimum samples and a detailed archaeological context, however, studies of handedness related to wear patterns on tools could furnish data of temporal diachronic significance for testing hypotheses born of behavioral studies. If man's genotype is part of his physical environment and if human cultural development takes place in the context of the physical environment, then any study concerned with a trait that is genetically determined has relevance to the study of archaeology.

Warp-faced woolen cloth decorated with stripes (4/964), Calama, Chile; leather sandal (9/2658) Cave, Chiu Chiu, Chile; leather and wood wallet (11/676), Chiu Chiu, Chile; leather pouch (11/1683), Chiu Chiu, Chile; wooden spindle with wooden whorl (11/1670), Chiu Chiu, Chile; wooden palette possibly for taking snuff (17/7960), Chiu Chiu Chile; wooden spatula with feline profile on handle (9/2688), Cave, Chiu Chiu, Chile; wooden tube probably for taking snuff, decorated at large end with figure of frontal human, tip broken (14/3816), Loa Valley, seven miles above Chiu Chiu, Chile.

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ANNA HYATT HUNTINGTON
1876-1973

On October 4, 1973, Anna Hyatt Huntington died in Bethel, Connecticut. She was the widow of Dr. Archer M. Huntington, who provided the land the museum building was erected upon, and was one of the Museum founders, as well as a long-time friend. Following her husband's death, Mrs. Huntington continued the family interest in Museum activities, and supported quite a few of them. She was an accomplished artist in her own right, and is among one of the nation's major sculptors. Her work is exhibited in numerous parks, buildings and museums throughout the country. Of particular importance was her great skill in portraying animal life; she was especially interested in medallic arts, and executed many superb medallic designs during her lifetime.

RESIGNATION OF WILLIAM BURKHART, MUSEUM TRUSTEE

We regret to announce the resignation of Mr. William H. Burkhart as a Trustee of the Museum. Originally elected to the Board in May, 1961, Mr. Burkhart has long been of service to the Museum. His counsel was always willingly provided, and we shall miss his sage advice.

THREE NEW RESEARCH ASSOCIATES APPOINTED

Three new Research Associates were appointed at the most recent Board of Trustees meeting. Dr. J. Cynthia Weber has been working on the Arkansas collections of the Museum on a grant from Arkansas State. She is also working on the Harrington papers. Mr. Peter Nabokov will continue his work with the Crow manuscripts, as well as preparing other material for publication. He is known to our membership as the author of *Two Leggings; Tijerina.* His present effort is directed toward completion of *A Crow Indian Miscellany*, which the Museum will publish next year.

The appointment of Mr. Lewis Krevolin has been renewed. The work of Mr. Krevolin in the field of ceramics is well known to our readers, and his continued association with us is a valued addition to our Research staff.

THE ISLAND CARIBS AND THEIR BASKETRY

by U. Vincent Wilcox III
Curator, Research Branch

Situated in the Caribbean between Guadeloupe and Martinique, the island of Dominica with its rugged coastline, towering volcanic peaks, and lush, tropical foliage, provides the last refuge for the once populous Island Carib. These people who now number only several hundred, previously occupied most of the islands of the Lesser Antilles. The Caribs traversed the Caribbean in large, open dugout canoes and island-hopped their way up the coast of South America. By the time of Columbus's voyage of discovery, these seafaring warriors were actively raiding the villages of the peaceful Arawakan farmers in the Greater Antilles for both captives and supplies. By resisting the forces of European colonialism that soon overwhelmed their Arawakan enemies, the Caribs earned for themselves a reputation in European tradition for being a race of bloodthirsty warriors. The term "bloodthirsty" was appropriate because they engaged in the practice of eating human flesh. In fact, their very name, Carib, has the dubious distinction of being the base from which the word "cannibal" is derived.

In 1903, a formal reserve was established for the remnant Carib population on the British-owned island of Dominica. Unlike the notorious bureaucratic mismanagement of the Indian reservations in North America, the Carib reserve is distinguished by its very lack of formal administration. This is perhaps largely due to the fact that Dominica continues to be one of the few "undiscovered islands" of the Caribbean. Its rugged terrain still remains relatively unspoiled by either colonialism or tourism. If the economic exploitation of the island's rich resources continues to increase, however, this idyllic situation may not survive much longer.

Carib history indicates that the original group of wanderers who first left South America for the islands consisted of all male warriors. Wives were acquired later from raids upon the resident Arawakan peoples. This theory is perhaps substantiated by the curious fact that Carib men and women spoke different languages. The language of the men, the dominant tongue, was Carib, while that of the women is believed to be of Arawakan origin.

Today, both languages are largely forgotten, but the separate and inferior status of women in Carib society persists. The Caribs believe that while the mother provides the body for the newborn child, the father

contributes the spirit. For this reason men frequently take wives from among the local West Indian population, and the children of such a union are considered Carib. If a Carib woman chooses to marry a man from outside her own community, however, she is forced to leave the reserve.

The modern Carib population subsists largely through fishing, and the commercial harvesting of bananas and other tropical forest products. Two indigenous crafts have persisted and provide a principal source of income. The manufacture of dugout canoes is a major industry and is still performed in the traditional manner. Huge tree trunks are hollowed and stretched using fire, hot stones, and water. The draft is increased by the addition of wooden planking along the gunwales. These canoes are sold throughout the islands for use by West Indian fishermen.

Basketmaking is the second surviving craft and, befitting a male-dominated society, is undertaken by the men. The baskets are similar in form to those manufactured in the Guianas, and bear superficial resemblances to the cane baskets of the Cherokee and Chitimacha in southeastern North America. In technique and construction, however, the Carib basket is unique. It consists of two baskets, one woven directly over another and joined together at the rim to form a container of double thickness. The unique feature of this double basket is the inclusion of a lining of leaves between the two layers of basketry. The result is a fine, water-tight container which, when capped by a similarly woven cover, effectively seals out the all-pervasive moisture of the humid Dominican climate.

The average basket is a rectangular container, often with a matching cover that fits snugly down over its upper quarter. Many have loop handles which appear to have been woven into the body of the basket after the latter was completed. The baskets are plaited, the elements crossing one another alternately at right angles. The use of differently colored elements accentuates the checkerboard patterned effect of this weave. The elements are usually tan and reddish brown, with occasional use of black, and average between one-eighth and one-quarter of an inch in width.

On a recent visit to the Carib reserve, I was shown the process and technique of Carib basketmaking. My Carib informants identified the tan elements as thin strips of bamboo. The brown and black fibers were called *laouma* or *luarouman.* The natural color of *laouma* when dried is reddish brown, and in order to produce the black color, strips of *laouma* are soaked for several days in black Dominican mud. I was shown a field of *laouma* and was told it was under cultivation expressly for the production of materials for basketmaking.

The bamboo and *laouma* fibers are cut into long strips with a machete,

Carib basket. Honor James at work on Carib reserve.

Photographs by U. Vincent Wilcox III

Carib basket with cover collected before 1921; width 8" (10/5277).

The bamboo and laouma fibers are cut into long strips with a machete, dyed in the mud if desired, and well dried inside the house before the basket is begun. First the inner basket is woven, starting from the base and working out and up to the rim where the loose ends are cut off. The outside of this basket is then thoroughly wrapped with freshly cut leaves which my informants called *balisi* or *balisier*, one of the many relatives of the banana that grows abundantly throughout the tropics. *Balisi* leaves are held in place by a few lengths of string made of thin strands of bamboo tied over and around the vessel.

The outer basket is woven directly over the inner one and its wrapping of *balisi* leaves. At the rim, the excess elements and protruding leaves are cut flush with the top. The two baskets are secured as one by tying thick strips of bamboo on both sides of the rim. The actual weaving of the average basket takes about two days. Though it was certainly not the case in aboriginal Carib society, basketmaking today, as with canoe manufacture, has become a largely specialized, full-time industry.

The water-proof construction of the Carib basket was originally designed to protect foodstuffs and other perishables from the deleterious effects of sea-water during the long voyages across the Caribbean. Although pottery was also manufactured, the light-weight, water-proof basket was the easier and more effective means of transporting supplies by canoe. Today the potter's craft has long been discarded, but the Caribs have adapted their basketry art for modern uses. In addition to the traditional basket form, hats, pocketbooks, and light-weight, water-proof suitcases are also woven, both for their own use, and for sale to their West Indian neighbors and passing tourists.

Carib basket obtained unfinished from Honor James 12" in length (24/8795).

MUSEUM COSTUME SHOWS

On November 3rd, Dr. Dockstader flew to Indianapolis to present the Museum's Costume Show. With him were six young women who have been active in this type of presentation: Jan Collins, Josephine Tarrant, Grace

Indian women participating in fashion show at Center for Latin American Affairs; (l-r) Josephine Tarrant, Jan Collins, Jane Lind, Marie Rogers, Linda Little Eagle, Robin Deer.

Photograph courtesy of D'Arlene Studio.

Valdez, Gail Peterson, Linda Little Eagle, and Robin Deer. Ellenda Wulfestieg accompanied the group to supervise the dressing needs, and Carla O'Rorke attended to publicity details. The show was presented twice, once to the patrons of the forthcoming *Indian Art of the Americas* exhibit, to be held January 28th, and then again at a benefit for the new cultural hall in Indianapolis. A large audience enjoyed the showing.

The Museum has organized a special costume presentation, using original costumes from the collection, worn by Indian people living in the New York City area. The presentation includes costumes from throughout the North American area, and offers the opportunity to view original costumes as they were worn some 50-100 years ago.

The group has been seen on the Dick Cavett Show, as well as on special occasions elsewhere. Most recently, eight of the young ladies participated in a showing at the Center for Latin American Affairs, in collaboration with the opening of the Museum's *Masterworks* presentation at the Metropolitan Museum of Art.

THE MASTERWORKS SHOW

Some time ago, the Museum offered a special selection of objects from the collection for presentation at the Metropolitan Museum of Art, to be known as MASTERWORKS FROM THE MUSEUM OF THE AMERICAN INDIAN. This exhibit, which included 200 of the Museum's finest objects, opened on October 17th, and closed on December 31st. The installation was done by Stuart Silver and Douglas Newton and selection and catalogue by Dr. Frederick Dockstader. The sixty-three page catalogue contains an historical profile of Dr. Heye, an extensive text and photographs of all 200 specimens in the show. It is priced at $2.50 and is obtainable from MAI bookshop.

Selections from the Masterworks and forthcoming INDIAN ART OF THE AMERICAS shows were shown on the Dick Cavett Television Show on November 28th.

BLACKWARE OF THE AMERICAS

The Fall Showing in the special exhibit gallery is *Blackware of the Americas,* a presentation of oxidized pottery from throughout the Western Hemisphere. Included are some 100 examples, highlighted by the fine collection presented recently by Mr. and Mrs. Harold J. Cohen. Their collection, which was obtained over many years directly from Julián and María Martínez, is one of the best. Until this gift, the Museum had only about three examples of the Martínez' work. In addition to this gift, Mrs. E. M. Warburg and Mrs. Lee Eisler contributed a total of twenty plates. Although the plates and the Martínez pottery form the basic strength of the Museum collections, Miles and David Lihn have loaned the Betty Lihn Memorial Collection for the duration of the show. This remarkable aggregation includes not only work from the Martınez', but also some wares from other Rio Grande Pueblos.

In addition to the Southwestern treasures, a large number of blackware examples from throughout the Americas were selected. Among the selections were vessels from the prehistoric Southwest which illustrate the origins of the famous Martınez works, wares from the Southeast and examples from Mexico, Central America and South America. The display covers a period of approximately 3000 years. A special folder has been issued concerning the show, entitled *Exhibit Leaflet No. 5* and is available on receipt of a stamped, self-addressed envelope.

Left: polished blackware jar with matte finish design, signed, "Maria and Santana," on loan from the Betty Lihn Memorial Collection (16/0522), 10" x 6¾", San Ildefonso, New Mexico; *middle:* blackware plate with matte finish design presented by Mrs. Lee Eisler and signed, "Marie and Julian" (24/7562), 12" x 1", San Ildefonso New Mexico; *right:* polished blackware water bottle with incised linear decoration; neck added separately (22/5674), 6½" x 9", Tlatilco, Mexico.

Photographs by Carmelo Guadagno

THE JANUS MODE IN TAINAN IMAGERY

by Michael Sellon
Research Associate

Ceramic production and decoration was a widespread occupation among the Taino-Arawak Indians of the West Indies. The most prevalent forms of this activity were vessels for the carrying and storage of foods and liquids. A characteristic feature of these vessels is the lug-handle, which for the most part was sculpted into the form of a head. The origin of the images depicted by these heads is hard to determine, for the Tainan utilized many resources, both natural and imaginary. Consequently, we are confronted by a range of characterizations, some zoomorphic, others anthropomorphic, combined with an array of geometric motifs and configurations.

Of the many modes that comprise the characteristic Tainan lug handle, there is one feature that is of special interest. It is the "Janus mode," which is subdivided into two attributes: the nucleated Janus-head and the tiered Janus-head. The very term "Janus" is frequently used to describe artifacts that present dual facial units and also refers to the mythogenic deity represented with a face on front and back, with symbolic associations to future and past, smile and grimace.

The fundamental difference, between the Tainan Janus and the classical depictions of this figure is that the Tainan has created an integrated dual-face, and in both attributes of the Tainan Janus, the two faces are perceived by means of the visual manipulation of the figures.

Let us consider each aspect of this mode and explore some of the reasons for these expressive features. The first category, termed the nucleated dual-head, owes its description to the way in which two faces are perceived on a single artifact. This is accomplished by a 180° rotation of the lug-handle, so that the eyes of the first face are the same for the second. They are, in a sense the nuclear feature shared by both faces.

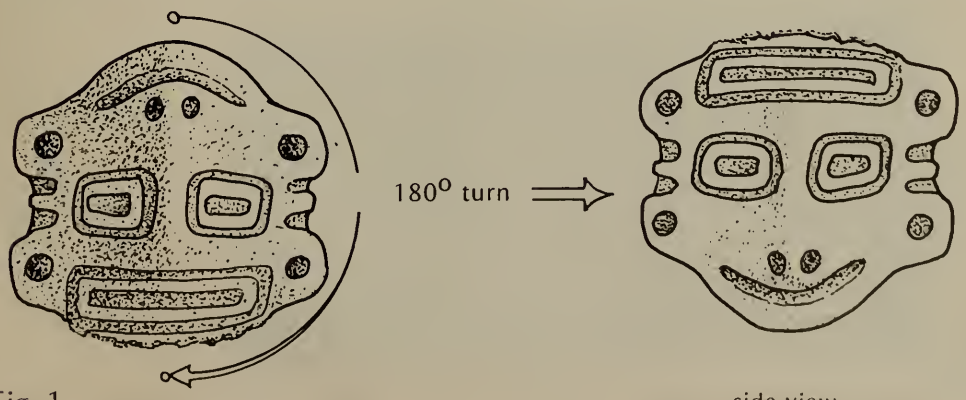

Fig. 1 side view

Photographs and drawings by Michael Sellon

As we can see from the first example, in one position the lug presents an anthropomorphic image, and once rotated, a zoomorphic creature with a generous smile.

As a prelude to further discussion, it is important to consider how these lugs were placed on the original vessel. The example illustrated above (Figure 1) presents particular problems in determining its original position, since there are no remnants of rim features to be seen. Careful examination provides clues, however, and it is possible to determine an approximate position as illustrated (Figure 2).

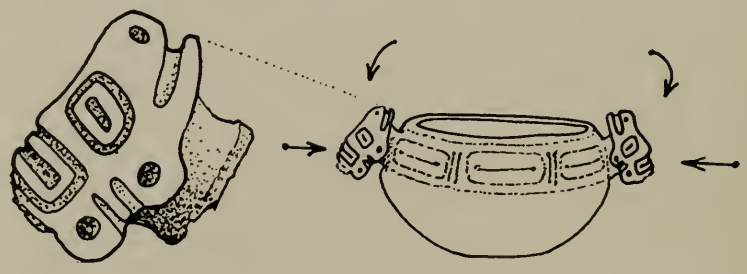

Fig. 2 zoomorphic view anthropomorphic view

The vessel shown is a characteristic shape synthesized from many whole examples, and an attempt was made to locate the lug handles in equally characteristic positions. Depending upon which view one adopts in relation to the vessel, either one or the other face of the nucleated figure will dominate.

In another example that was unearthed in the same site on the eastern coast of the Dominican Republic, we see a basic similarity of treatment to that in Figure 1. It is possible to surmise that the same artisan created both objects.

Fig. 3

Although this Janus image, as well as that shown in Figure 4, suggests an

imaginative correlation with the dual theatrical masks of comedy and tragedy, the Tainan has innovated a unified combination of the two extremes.

In figure 4, an example found on Gonave Island, at the western extreme of Hispaniola (Haiti), attests along with other specimens, to the wide spread use of the Janus mode. This image consists of a most dramatic grimace from one view, while the other is quite neutral. In this illustration there is the advantage of a rim fragment, in which we can more easily approximate a reconstruction of its original position.

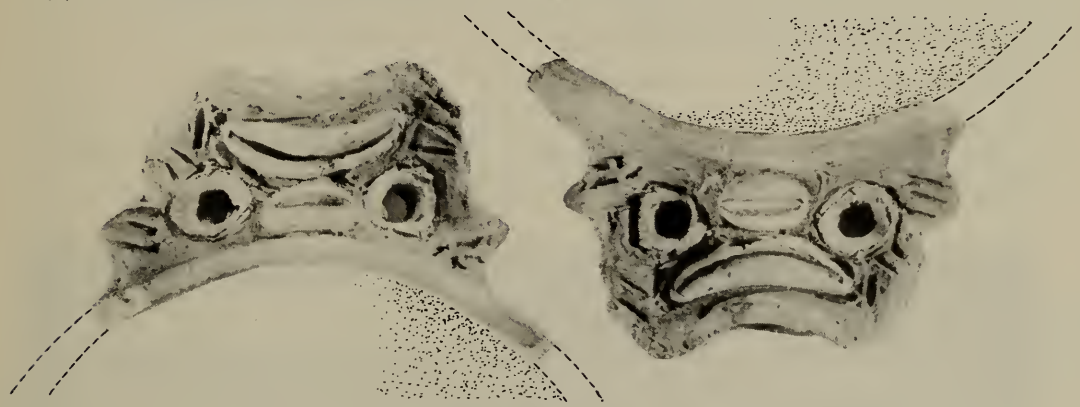

Fig. 4

Both Janus attributes, in this case, are perceived from a position above the vessel, especially if placed on the ground, where it was typically placed during the preparations of meals.

Other examples from the museum collection offer further illustration of the nucleated dual-face. In Figure 5(a) we see a profile strongly representative on the monkey. It is uncertain whether the Tainos had brought these lively creatures from mainland South America, or were simply recreating them from memory. Upon rotation, we perceive a smiling cartoon-like image as seen in illustration 5(b).

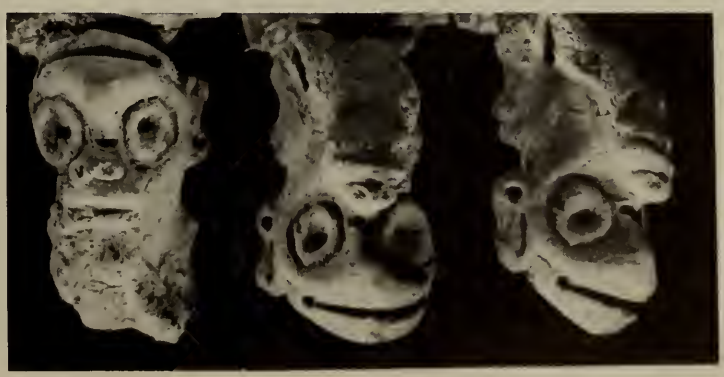

Fig. 5 (a) & (b)

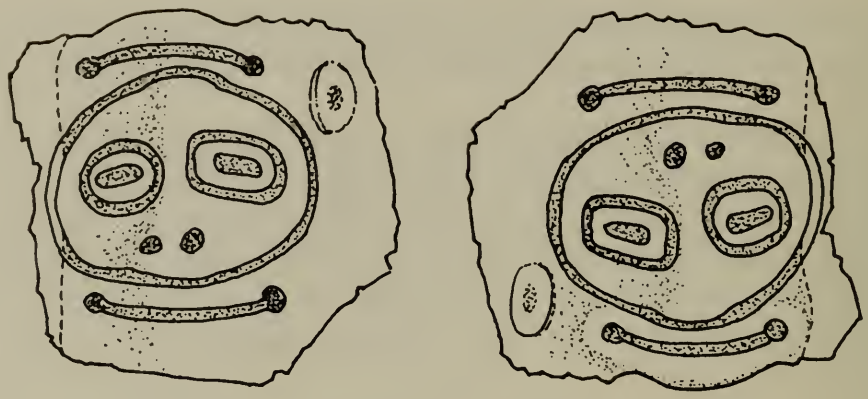

Fig. 6

Figure 6 presents an equally broad smile on both faces, with variation centered upon one with nostrils, and one without.

Fig. 7 & 8

Figures 7 and 8 represent a unit of expression with the common configura-

tion of one face with mouth, and one without. A major difference between each of these examples is that in Figure 7, the mouth lies within the line framing the eyes, while in the other, Figure 8, the mouth lies outside the line.

Examination of the above examples indicates a design preoccupation that gives us certain clues about the nature of the Taino. Details of the nucleated dual-face point to a perceptual capacity that might possibly have been applied to a world greater than that encompassed by these ceramic figures. This ability to create an image with an enigmatic perspective does give the observer a glimpse of the Tainan's sensitivity for multi-perceptual relationships. This conception will find additional support when considered with the next category of the Janus mode.

Before studying specimens that represent the second attribute of the Janus mode, let us view a lug that expresses a combination of both features.

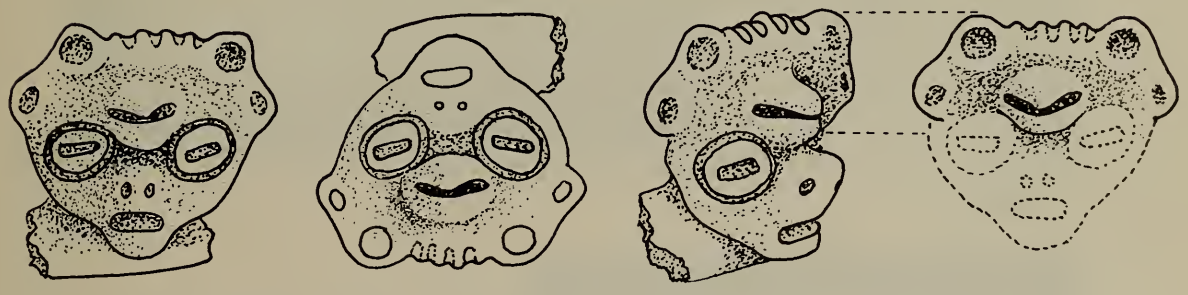

Fig. 9

In contrast to what was perceived from the previous figures as a result of rotation, this example depicts one face as mammalian in character, while the other appears to be an aviform, inspired perhaps by the parrot or owl. If the lug is positioned in order to produce the mammalian image, we see that the bird-beak on the forehead can be visually linked to the eye-shaped lobes on the crown. Together they comprise the facial ingredients of an aviform "tiered," we might say, on top of the mammal face. The placement of one facial unit in series above or below another, introduces the second emphasis described, that of the "tiered Janus" figure. The unique feature of the Tainan approach to this configuration is that in most cases, one facial unit incorporates elements of another.

In Figure 10, we perceive a major facial unit that is depicted in illustration (a). The mouth is formed by a deep incised line that extends outward to create a continuous band encompassing the whole eye and nostril

Fig. 10 (a)

region. In similar fashion to the previous Figure 9, where two eye-shapes on the crown join elements to form a bird, this specimen in like manner, offers two globular crown shapes which, in conjunction with the deep incised line, produces another facial unit. The observer undergoes a *shift of focus*, in which the line in the forehead of one face becomes the mouth of another.

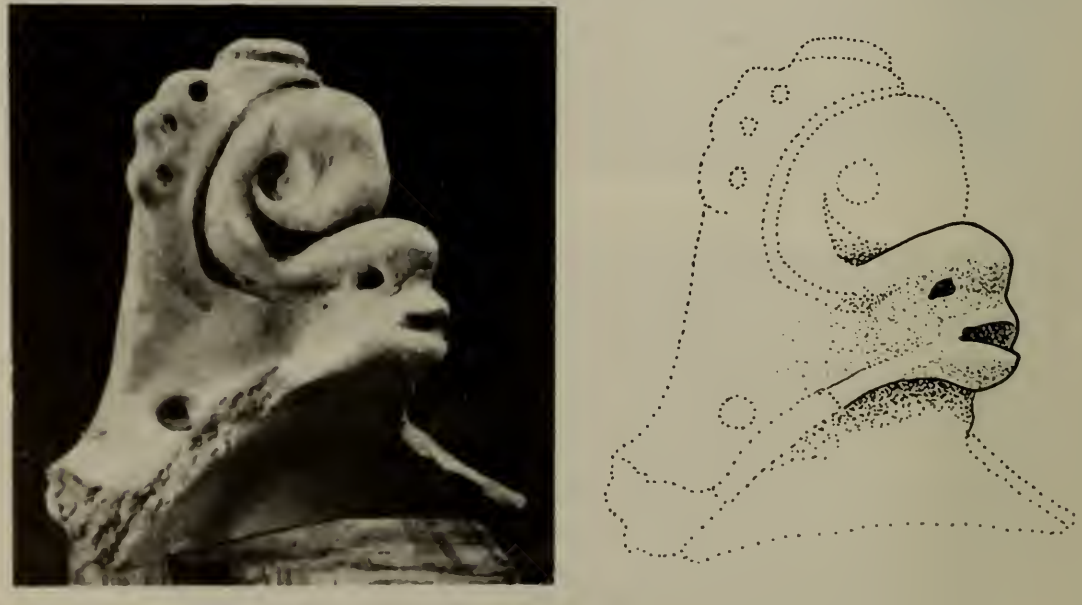

Fig. 11

A most dramatic use of a figure-ground shift is exemplified in the next example of the tiered Janus mode. Even at first glance, Figure 11 offers

an equivocal image. One's primary perception of this specimen would normally encompass the whole: a face with jutting nose and mouth. As one draws in further detail, however, the quizzical break across the nose creates a peculiar isolation of the nose and mouth. At least to this observer, there emerges another "sub-face," looking much like a small porpoise. The discernment of the Janus character of this specimen is the reverse of that used on Figure 10, in which the secondary face was perceived above, rather than below.

Fig. 12

In the case of Figure 12, we are provided with not only a rim fragment, but whole sections of the original vessel, as well as both lug-handles and their placement. The profile view of the right-hand lug reveals a complete perforation and indicates that this vessel may well have been provided with a cord for hanging. As we focus upon this perforation, especially in the profile view, a definitive facial unit is made apparent, dramatized by light appearing from the other side. This style of eye design conforms with many similar constructions of other non-Janus mode lugs. When the field of vision includes the pair of orb-like forms at top, especially in the frontal view, an even more dominant facial unit is composed. This differs from previous examples where the "sub-face" is proportionately smaller in relationship to the dominant face. Observation of the different faces is necessarily determined by whether one is viewing the piece laterally or frontally.

The foregoing examples amplify our perception of the Tainan mind, and of how the Tainan image-maker was aware of perceptual shifts as a result of manipulation and position. Again, has the artisan exemplified Tainans' perception of their world? If so, what effects might this have had

upon other cultural institutions besides ceramic making?

Let us complete this survey of specimens by presenting two final examples that certainly belong in the category of the Janus mode, yet provide a problematic situation in which three or more facial units are perceptible in a single figure. This may tend to support the possibility that the Tainan concerned himself with multi-faced images beyond the Janus dualism.

Fig. 13.

By again observing the example as a whole, we engage a dominant facial unit with simple geometric character, almost reminiscent of a knight-errant peering from the portal of his visor. Shifting focus to the crown, an even simpler face is apparent, produced by a design of incised lines and dots. Retaining focus on the two dot-eyes of the crown-face, we return to view a side profile of the whole which *seems* to define a bird or reptile with tongue protruding. "Seems" is emphasized here in order to avoid affirming that this last image truly represents a third face, designed consciously by the Tainan ceramist. This judgment may only be so affirmed by a consensus of many observers.

The final specimen for consideration is offered so that the reader might participate in an exercise in multi-faced perception. Figure 14 presents a complex image, combining the basic attributes of the Janus mode, and by means of opening up other possibilities for more facial units (gestalts), we can reveal a virtual Pandora's box of animate features.

Instead of verbally describing the process of facial discernment, as in preceding examples, the reader is offered a visual "charting" by which we

follow the shifts of focus until completing the maximum facial possibilities. The first two illustrations portray the whole specimen, frontally and laterally. The subsequent images present the facial units in solid line (figure) and the subordinate features in dotted lines (ground).

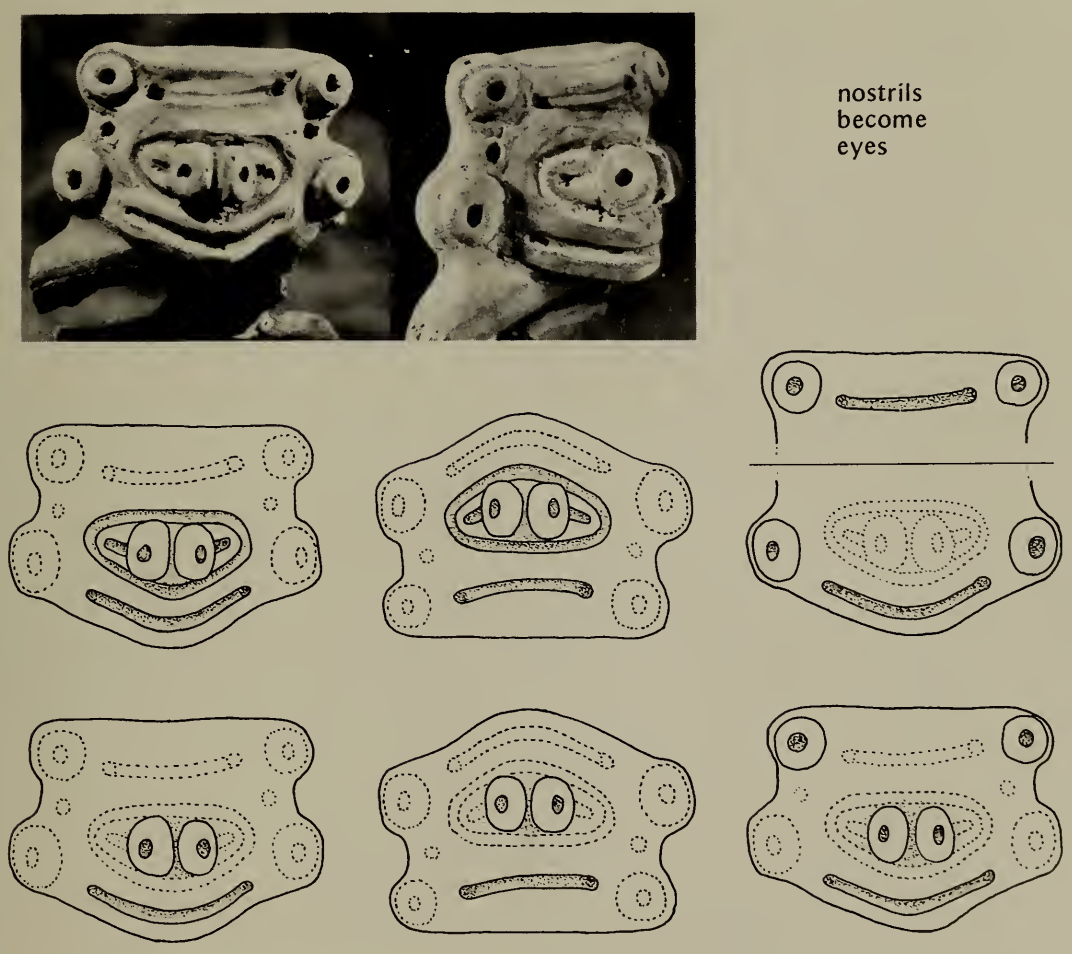

Fig. 14.

Admittedly, we have out-stretched the logical boundaries of perception and interpretation used for the Janus mode figures. Nonetheless, this "invitation to riot" with the final example might well contribute valuable experience towards determining the limits of the imaginative process when applied to any number of situations with unfamiliar artifacts. Many contemporary attempts at developing an integral perceptual capability foment exercises which follow the order of the preceding analysis. These are but hints of direction, by which these enigmatic images may offer insights into their creators' view of the world.

A NEW PUBLICATION

Our new publication has been completed and is now available. Entitled, *Notes on the Ethnology of the Indians of Puget Sound, Miscellaneous Series No. 59,* by T. T. Waterman, it is 112 pages and contains forty-five plates and two maps. It is priced at $3.50.

THE ANNUAL REPORT

Indian Notes, Volume IX, #3 consisted of the Annual Report of the Museum. In the past, this was prepared for distribution to Trustees and a limited group of interested friends. In the thought that our Membership should know more about the Museum and its general activities, it was determined to publish the Annual Report regularly, as part of the *Indian Notes* series. We welcome your comments.

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